BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Improvements to roads and drains in Kodigehalli, Bhadrappa layout Devinagara and surroundings Ward No - 08

Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
SRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-3.7)								
For RCC Drain	Cum							
Kodigehalli								
Sri Rudra Nilaya		1	70.00	1.00	0.90	63.00		
Near Railway track		2	91.00	1.00	0.90	163.80		
Cross Rd -1		2	100.00	1.00	0.90	180.00		
Cross Rd -2		2	100.00	1.00	0.90	180.00		
Cross Rd -3		2	100.00	1.00	0.90	180.00		
Cross Rd -4		2	150.00	1.00	0.90	270.00		
Cross Rd -5		2	124.00	1.00	1.00	248.00		
Cross Rd -6		2	100.00	1.00	1.00	200.00		
Culvert		10	5.00	1.60	1.00	80.00		
						1564.80	215.28	**336870.14**
Basic Rate Rs.=	130.00							
Add 6% A.W Rs. =	7.80							
Sub Total =	137.80							
Add Lead, Loading and Unloading (27*28*8)+57	77.48							
Total Rate Rs. =	**215.28**							
KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with aggregates 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
For Drain	Cum							
Kodigehalli								
Sri Rudra Nilaya		1	70.00	0.90	0.15	9.45		
Near Railway track		2	91.00	0.90	0.15	24.57		
Cross Rd -1		2	100.00	0.90	0.15	27.00		
Cross Rd -2		2	100.00	0.90	0.15	27.00		
Cross Rd -3		2	100.00	0.90	0.15	27.00		
Cross Rd -4		2	150.00	0.90	0.15	40.50		
Cross Rd -5		2	124.00	0.90	0.15	33.48		
Cross Rd -6		2	100.00	0.90	0.15	27.00		
Culvert		10	5.00	1.40	0.15	10.50		
						226.50	5421.90	**1228060.35**
Basic Rate Rs.=	5115.00							
Add 6% A.W Rs. =	306.90							
Total Rate Rs. =	**5421.90**							

Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
			m	m	m		in Rs	in Rs
Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)								
For **RCC Drain**	Cum							
Kodigehalli								
Bottom **slab**								
Sri Rudra Nilaya		1	70.00	0.75	0.15	7.88		
Near Railway track		2	91.00	0.75	0.15	20.48		
Cross Rd -1		2	100.00	0.75	0.15	22.50		
Cross Rd -2		2	100.00	0.75	0.15	22.50		
Cross Rd -3		2	100.00	0.75	0.15	22.50		
Cross Rd -4		2	150.00	0.75	0.15	33.75		
Cross Rd -5		2	124.00	0.75	0.15	27.90		
Cross Rd -6		2	100.00	0.75	0.15	22.50		
Side **walls**								
Sri Rudra Nilaya		2	70.00	0.15	0.60	12.60		
Near Railway track		4	91.00	0.15	0.60	32.76		
Cross Rd -1		4	100.00	0.15	0.60	36.00		
Cross Rd -2		4	100.00	0.15	0.60	36.00		
Cross Rd -3		4	100.00	0.15	0.60	36.00		
Cross Rd -4		4	150.00	0.15	0.60	54.00		
Cross Rd -5		4	124.00	0.15	0.60	44.64		
Cross Rd -6		4	100.00	0.15	0.60	36.00		
						468.00		
Culvert Raft		10	5.00	1.20	0.20	12.00		
Culvert Wall		20	5.00	0.23	0.60	13.80		
						25.80		
				Net Qty.		**493.80**	7070.20	**3491264.76**
Basic Rate Rs.=	6670.00							
Add 6% A.W Rs. =	400.20							
Total Rate Rs. =	**7070.20**							
IRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)								
Considering steel For Drain @ 60kg / cum	Tonne		468.00	0.060	--	28.08		
Considering steel For culvert @ 100kg / cum	Tonne		25.80	0.100	--	2.58		
						30.66	73992.24	**2268602.08**
Basic Rate Rs.=	69804.00							
Add 6% A.W Rs. =	4188.24							
Total Rate Rs. =	**73992.24**							

Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
			m	m	m		in Rs	in Rs
Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
For drain cover slab	Sqm							
Kodigehalli								
Sri Rudra Nilaya		1	70.00	0.75	--	52.50		
Near Railway track		2	91.00	0.75	--	136.50		
Cross Rd -1		2	100.00	0.75	--	150.00		
Cross Rd -2		2	100.00	0.75	--	150.00		
Cross Rd -3		2	100.00	0.75	--	150.00		
Cross Rd -4		2	150.00	0.75	--	225.00		
Cross Rd -5		2	124.00	0.75	--	186.00		
Cross Rd -6		2	100.00	0.75	--	150.00		
						1200.00		
Deduct 10% slabs for BS Slab						120.00		
						1080.00	2337.00	**2523960.00**
Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including curing etc., complete, 10 cms thick. Page No. 27/ Item No. 5.31.2 PWD SR 2018-19								
For Drain	Sqm							
Kodigehalli								
10% slabs for BS Slab						120.00		
						120.00	966.72	**116006.40**
Basic Rate Rs.=	912.00							
Add 6% A.W Rs. =	54.72							
Total Rate Rs. =	**966.72**							
Providing One line dressing to granite stone slab/ granite stone masonry as per speciication (P.No.26, I.No.5.17 of PW,P&IWTD SR 2018-19)								
For Drain	Sqm							
Kodigehalli								
10% slabs for BS Slab						120.00		
						120.00	950.82	**114098.40**
Basic Rate Rs.=	897.00							
Add 6% A.W Rs. =	53.82							
Total Rate Rs. =	**950.82**							
Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
For Culvert Slabs	Sqm	10	5.00	1.20	--	60.00		
Dry slab		1	19.00	0.90		17.10		
						77.10	5418.00	**417727.80**
MORRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic drills, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations for disposal of dismantled materials upto a lead of 1000 metrers, stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202.(I 18.47,P No-140)								

Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
For Road	Cum							
Kodigehalli								
Sri Venkateshwara Flower Deco		1	32.00	3.60	0.20	23.04		
		1	23.00	2.70	0.20	12.42		
Radhika Fashion		1	19.00	1.60	0.20	6.08		
Kote Lt, 1st cross RHS		1	57.00	2.70	0.20	30.78		
Kodigehalli, SriChannakeshava		1	109.00	2.80	0.20	61.04		
Continued		1	184.00	4.40	0.20	161.92		
Govt School		1	12.00	6.30	0.20	15.12		
4th cross, RS		1	48.00	3.20	0.20	30.72		
5th cross, RS		1	48.00	2.70	0.20	25.92		
5th cross, LS		1	55.00	3.20	0.20	35.20		
		1	19.00	3.60	0.20	13.68		
Cross Rd -1		1	100.00	3.60	0.20	72.00		
Cross Rd -2		1	100.00	3.90	0.20	78.00		
Cross Rd -3		1	100.00	3.50	0.20	70.00		
Cross Rd -4		1	150.00	3.50	0.20	105.00		
Cross Rd -5		1	124.00	3.50	0.20	86.80		
Cross Rd -6		1	100.00	4.10	0.20	82.00		
						909.72	973.42	**885539.64**
Basic Rate Rs.=	899.00							
Add 6% A.W Rs. =	53.94							
Sub Total =	952.94							
8Km Lead =(2*1.28*8)	20.48							
Total Rate Rs. =	**973.42**							

8888 M600-1.Providing and Constructing **dry lean cement concrete mix CC 1:5:10** base with OPC 53mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates 0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-2, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5, with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (P.No-174,I No-22.1.1)

For Road	Cum							
Kodigehalli								
Sri Venkateshwara Flower Deco		1	32.00	3.60	0.15	17.28		
		1	23.00	2.70	0.15	9.32		
Radhika Fashion		1	19.00	1.60	0.15	4.56		
Kote Lt, 1st cross RHS		1	57.00	2.70	0.15	23.09		
Kodigehalli, SriChannakeshava		1	109.00	2.80	0.15	45.78		
Continued		1	184.00	4.40	0.15	121.44		
Govt School		1	12.00	6.30	0.15	11.34		
4th cross, RS		1	48.00	3.20	0.15	23.04		
5th cross, RS		1	48.00	2.70	0.15	19.44		
5th cross, LS		1	55.00	3.20	0.15	26.40		
		1	19.00	3.60	0.15	10.26		

Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
			m	m	m		in Rs	in Rs
Cross Rd -1		1	100.00	3.60	0.15	54.00		
Cross Rd -2		1	100.00	3.90	0.15	58.50		
Cross Rd -3		1	100.00	3.50	0.15	52.50		
Cross Rd -4		1	150.00	3.50	0.15	78.75		
Cross Rd -5		1	124.00	3.50	0.15	65.10		
Cross Rd -6		1	100.00	4.10	0.15	61.50		
						682.29	3800.10	**2592770.23**
Basic Rate Rs.=	3585.00							
Add 6% A.W Rs. =	215.10							
Total Rate Rs. =	**3800.10**							

Constructing un-reinforced, **plain cement concrete for pavements using Grade concrete M30** with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)

For Road	Cum							
Kodigehalli								
Sri Venkateshwara Flower Deco		1	32.00	3.60	0.15	17.28		
		1	23.00	2.70	0.15	9.32		
Vasthika Fashion		1	19.00	1.60	0.15	4.56		
Side Lt, 1st cross RHS		1	57.00	2.70	0.15	23.09		
Kodigehalli, SriChannakeshava		1	109.00	2.80	0.15	45.78		
Continued		1	184.00	4.40	0.15	121.44		
Govt School		1	12.00	6.30	0.15	11.34		
1st cross, RS		1	48.00	3.20	0.15	23.04		
1st cross, RS		1	48.00	2.70	0.15	19.44		
1st cross, LS		1	55.00	3.20	0.15	26.40		
		1	19.00	3.60	0.15	10.26		
Cross Rd -1		1	100.00	3.60	0.15	54.00		
Cross Rd -2		1	100.00	3.90	0.15	58.50		
Cross Rd -3		1	100.00	3.50	0.15	52.50		
Cross Rd -4		1	150.00	3.50	0.15	78.75		
Cross Rd -5		1	124.00	3.50	0.15	65.10		
Cross Rd -6		1	100.00	4.10	0.15	61.50		
						682.29	5210.96	**3555385.90**
Basic Rate Rs.=	4916.00							
Add 6% A.W Rs. =	294.96							
Total Rate Rs. =	**5210.96**							
							Sub Total 1 Rs.	**17530285.70**

Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
			m	m	m		in Rs	in Rs
Add GST @ 12%								2103634.28
DPR & PMC Charges including GST								366000.00
							Sub Total 2 Rs.	19999919.99
Miscellaneous & Rounding off								80.01
							Total Rs.	20000000.00

CERTIFICATE:

The work spot has been inspected by me and the work is found to be necessary.

The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2018-2019.

The Provisions made in the estimate are quite necessary and adequate.

The area comes with in the BBMP limits.

Assistant Engineer	Assistant Executive Engineer	Executive Engineer 25/11/19
Project Division Yelahanka	Project Division Yelahanka	Project Division Yelahanka
BBMP	BBMP	BBMP

Technical Sanction
Accorded For .....
Head of A/C.....
CER NO :..... Dt:...

[TA] CE (YNK)